

Work Order ID 112713***112713***

Page 1

Wednesday, February 05, 2014 2:59:13 PM

Item ID: D3391-025

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Aft Tube Assembly

Start Date: 2/5/2014 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 2/14/2014 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: 10 Date: 2/02-6 Tooling: _____ Date: _____Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3391	I								

100

0.00

100

MORI SEIKI CNC LATHE LARGE

Mori Seiki

Memo

0.00

Mori Seiki CNC Lathe Large

Turn as per Folio FA599

Rev: AA & Dwg D3391 Rev: H

1 \emptyset _____
mm, L
14/02/19

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

1 \emptyset _____
mm, L
14/02/19

112

QC5- Inspect part completeness to step on W/O

0.00

112

QC

Memo

0.00

Quality Control

5th
14/02/19

1 _____

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Item ID: D3391-025 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Aft Tube Assembly
Start Date: 2/5/2014 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 2/14/2014 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120		0.00							
120	HAAS CNC VERTICAL MACHINING #1								
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	1-Machine as per Folio FA 599 Rev: <u>AA</u> & Dwg D3391 Rev: <u>I</u> 2-Deburr								
130		0.00							
130	QC2- Inspect parts off machine FAI/FAIB								
QC	Memo	0.00							
Quality Control									
140		0.00							
140	QC8- Inspect parts - second check								
QC	Memo	0.00							
Quality Control	***INSPECT INSIDE BORE***								

DAS
08
9-89

15

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Item ID: D3391-025

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Aft Tube Assembly

Start Date: 2/5/2014 Start Qty: 1.00

1

Cust Item ID:

Required Date: 2/14/2014 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150		0.00							
150	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	1-Drill (PILOT HOLE) aft cap holes per Dwg D3391 using DT8803								
160		0.00							
160	BENDING MACHINE - SKIDTUBES								
CNC Bend 1	Memo	0.00							
CNC Delta 100 Bender	Form as per Dwg D3391 Using Bend Prog 3391025								
170		0.00							
170	QC5- Inspect part completeness to step on W/O								
QC	Memo	0.00							
Quality Control									

DC 14/03/19

- DC 14/03/25

DAS
03
9-89

DD 14-3-25

H 4.2

Doc 3-5-

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Item ID: D3391-025

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Aft Tube Assembly

Stop

NS2

Start Date: 2/5/2014 Start Qty: 1.00

1

Cust Item ID:

Required Date: 2/14/2014 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

0.00

180

Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Open Aft cap pilot hole to .208" as per Dwg D3391

2-Drill float bag holes using DT8809 as per Dwg D3391(Holes marked "A" Only.

3-Drill wearplate holes as per Dwg D3391 using DT8878(Mid Tube) & DT8217
Wearplate Jig .

*****Do Not Open To Finished Size*****

4-Drill Wearshoe holes as per DWG D3391 using DT8939 locating from 2
previously drilled aft wearplate holes.

5-Open wearplate holes to 0.297" and c'bore as per dwg D3391

6-Open up all float bag holes to 0.328" and c'sink as per Dwg D3391.

7-Deburr

8- Scribe batch # on fwd end

- DCL 14/04/02

DCL 14-4-3

DCL 14-4-3

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N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 2/5/2014 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 2/14/2014 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC5- Inspect part completeness to step on W/O	0.00							
190 QC Quality Control	Memo	0.00							① 1404-04 DAS 9 9-89
200	Chemical Conversion Coat per QSI005 4.1	0.00							
200 HandFinish Hand Finishing	Memo	0.00							14-47 DGL 7/6/
210	QC7-Inspect Chemical Conversion Coat	0.00							
210 QC Quality Control	Memo	0.00							1 Ø DC 14/04/09

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N900040100

Setup Start

NS1

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Stop

NS2

Item Name: Aft Tube Assembly

Start Date: 2/5/2014 Start Qty: 1.00

1

Cust Item ID:

Required Date: 2/14/2014 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

220

0.00

220

Skidtubes

Skidtubes

Memo

0.00

1- Instal spacers as per dwg D3391

A/R Magnabond 6398 Batch: 127227

exp. date: 14/05/05

cure time 12hrs as per QSI0015

2- Grind crossbolts flush

3- Back drill using #9 drill

4- Touchup Magnabond

5- Deburr

230

0.00

230

QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

- DC 14/04/09

- DC 14/04/10

27
9/89
14/4/11

Work Order ID 112713

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Item ID: D3391-025

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N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Aft Tube Assembly

Start Date: 2/5/2014 Start Qty: 1.00

1

Cust Item ID:

Required Date: 2/14/2014 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
235	Pressure Wash per QSI005 4.3	0.00							
235									
HandFinish	Memo	0.00							
Hand Finishing	AND REALODINE AS PER PAR09-043								
240	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
240									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: 2:35 OVEN TEMPERATURE: 320° FINISH TIME: 3:05								
250	QC3- Inspect Part Finish	0.00							
250									
QC	Memo	0.00							
Quality Control									

1 Wbaf 151 φ 11-9-9 DAS 34 9-891 φ 11/09/18 DAS 15 9-89

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N900040100

Setup Start *NS1*

Stop ***NS2***

Start Date: 2/5/2014 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 2/14/2014 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

0.00

260

HandFinishing

0.00

HandFinish

Hand Finishing

Memo

1-Install inserts as per Dwg D3391

2-Install Aft Cap as per Dwg D3391

A/ R Sikaflex-241/-291 11129453

Sikaflex expiry date: 14/11

3- INSTALL WEARPLATES AS PER DWG

0.00

270

QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

Quality Control

DAS
38
9-89 14-9-22

0.00

280

Identify as per dwg & Stock Location: w/o

0.00

Packaging

Memo

Packaging

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Item ID: D3391-025 Accept ***N900040100*** Setup Start ***NS1***
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Start Date: 2/5/2014 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 2/14/2014 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
290	QC21- Final Inspection - Work Order Release	0.00							
290									
QC	Memo	0.00							
Quality Control									

MLJ 14-09-22

4-9-02

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Picklist Print

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Page 1

Work Order ID: 112713

112713

Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 2/5/2014

Required Date: 2/14/2014

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev B 06-02-07 ECN773 dwg rev. D EC
IPP Rev:C 06-03-28 Update Manuf. Instructions JLM
IPP rev D 07.03.20 revF dwg EC
IPP rev E 07.11.07 rev G dwg ecn 1053p EC verified by: DD
IPP Rev:F 07-11-13 ECN 1056 DD verified by: EC
IPP Rev:G 08-09-10 revH as per dwg DD verified by:EC IPP Rev:H
11.11.14 AS PER REV.I DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4095-047		Manufactured	No			260	Each	18.0000	1	1			
D4095-047													
Wearpad Assembly													

Location	Loc Qty	Loc Code
FP001	18	
102241	2	
108289	16	

D4095-049		Manufactured	No			260	Each	13.0000	1	1			
D4095-049													
Wearpad Assembly													

Location	Loc Qty	Loc Code
FP001	12	
109670	12	B120495
FP002	1	
102216	1	

D6014-090		Manufactured	No			100	Each	77.0000	1	1			
D6014-090													
ALUMINUM EXTRUSION													

Location	Loc Qty	Loc Code
LG003	77	
79742	17	
86063	60	

1 mm.L 14/02/18

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Work Order ID: 112713

112713

Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 2/5/2014

Required Date: 2/14/2014

Start Qty: 1.00

Required Qty: 1.00

D3670-4-200

Manufactured No

230

Each

351.0000

4

4

D3670-4-200

Bushing

02/14/09

LocationLoc QtyLoc Code

FG

10

87709

10

LG001

341

103880

60

109108

242

96240

39

D2646

Manufactured No

270

Each

23.0000

1

1

D2646

Aft Cap

all 1/10/15

LocationLoc QtyLoc Code

FG

4

85848

2

90495

2

FP001

19

103306

18

107857

1

D3672-1

Manufactured No

270

Each

850.0000

2

2

D3672-1

Phenolic Washer

all 1/10/15

LocationLoc QtyLoc Code

FG

10

85222

10

ST060

840

103845

100

93886

522

99099

218

B113581

y2

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Work Order ID: 112713

112713

Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 2/5/2014

Required Date: 2/14/2014

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130 AELS4-1032-130 Purchased No

260 Each 57.0000 14 14

AI S4-1032-130

Rivnut

JL id 02/18

LocationLoc QtyLoc Code

st510

57

M128649

x 14

M126109

57

ALS4-1032-225 AELS8-1032-225 Purchased No

270 Each 101.0000 8 8

AI S4-1032-225 X AHS7-1032-225

Rivnut

JL id 02/18

LocationLoc QtyLoc Code

FG

30

M128649

x 8

M127028

30

ST280

10

M127028

10

st555

61

M127092

61

AN3C4A Purchased No

270 Each 2,616.000 6 6

AN3C4A

Bolt

JL id 02/18

LocationLoc QtyLoc Code

FG

20

M129520

x 6

122814

20

ST513

2596

125388

1835

M127410

261

M127832

500

Picklist Print

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Work Order ID: 112713

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Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 2/5/2014

Required Date: 2/14/2014

Start Qty: 1.00

Required Qty: 1.00

AN3C5A Purchased No

270 Each 1,881.000 4 4

AN3C5A

Bolt

Location

Loc Qty

Loc Code

FG

5

M129913

122800

5

vd

ST350

1876

M128057

1876

NAS1149C0332R Purchased No

270 Each 9,652.000 10 10

NAS1149C0332R

WASHER

Location

Loc Qty

Loc Code

GA

1169

125654

1169

st510

8483

m126319

865

m127306

2500

m127410

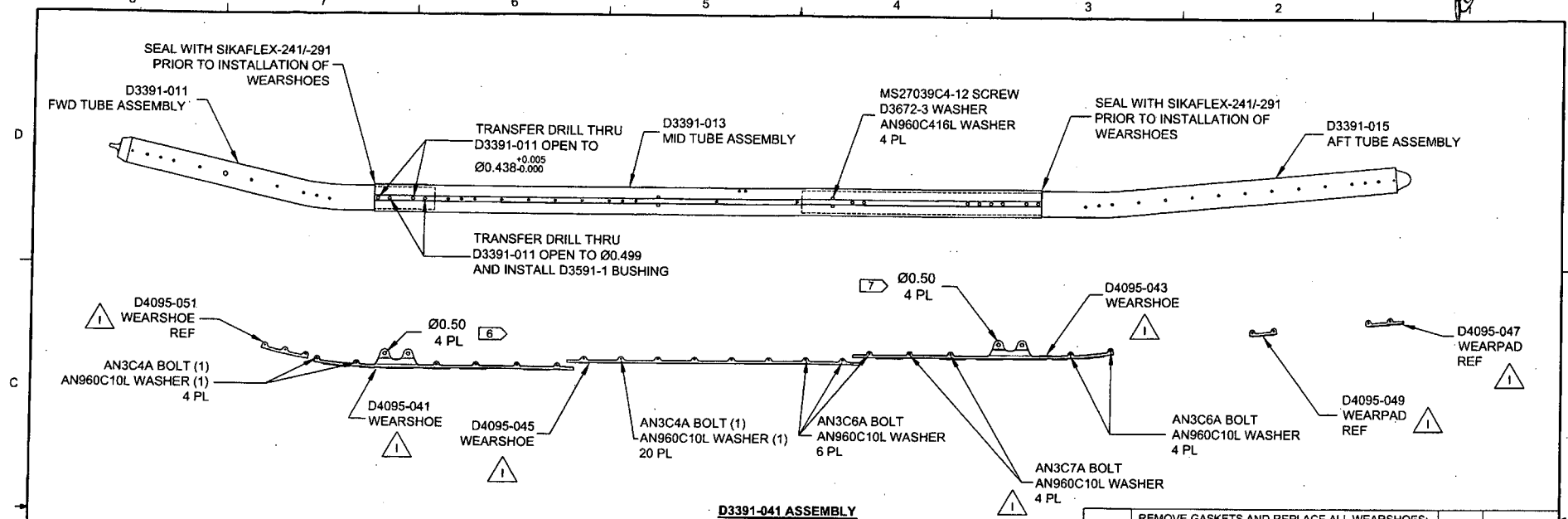
3000

m127831

2118

X10

112713
014-02-6



D3391-041 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

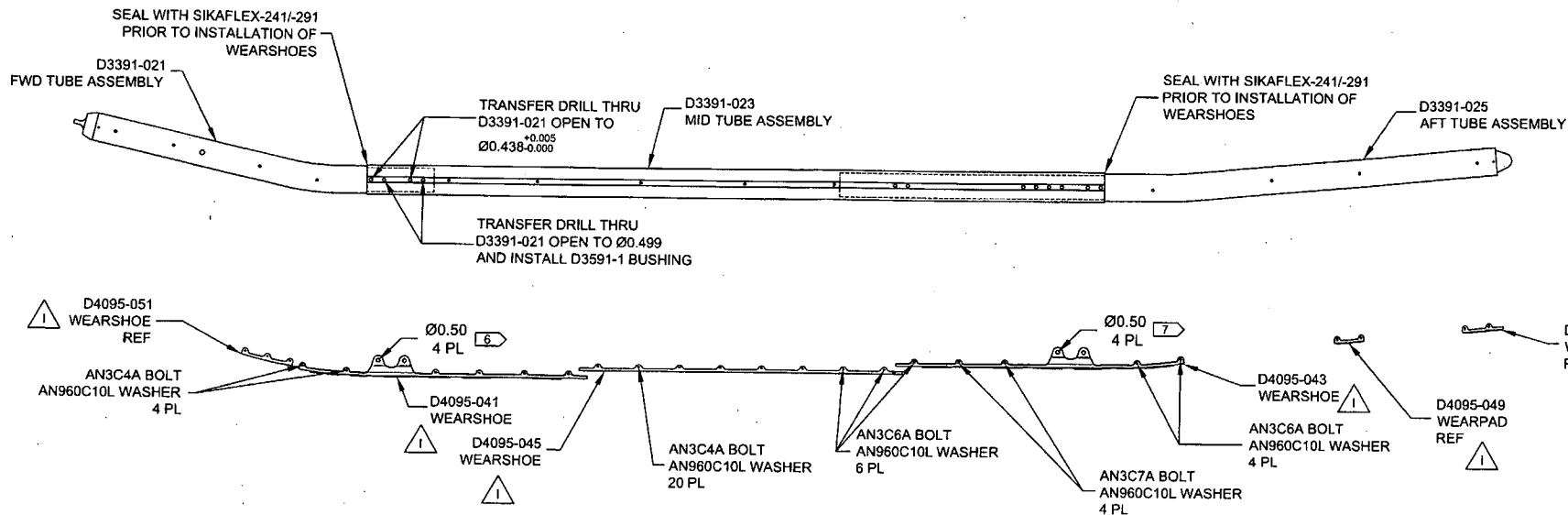
QTY	PART NUMBER	DESCRIPTION
X	D3391-041	FLOAT SKIDTUBE ASSEMBLY
1	D3391-011	FWD TUBE ASSEMBLY
1	D3391-013	MID TUBE ASSEMBLY
1	D3391-015	AFT TUBE ASSEMBLY
2	D3591-1	BUSHING
4	D3672-3	WASHER
1	D4095-041	WEARSHOE
1	D4095-043	WEARSHOE
1	D4095-045	WEARSHOE
1	D4095-047	WEARPAD
1	D4095-049	WEARPAD
1	D4095-051	WEARSHOE
24	AN3C4A	BOLT
10	AN3C6A	BOLT
4	AN3C7A	BOLT
38	AN960C10L	WASHER
4	MS27039C4-12	SCREW
4	AN960C416L	WASHER

GENERAL NOTES

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON"
AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES
FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT
WHERE INDICATED.
- 6) FIT D4095-041 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH
APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND
TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-041
- 7) FIT D4095-043 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH
THE APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND
TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-043

RELEASED
2011-11-04
ECN#11-662

I	REMOVE GASKETS AND REPLACE ALL WEARSHOES; PARTS LIST UPDATE, ZN A8-1, ZN A8-2, ZN A6-4, ZN B6-8; LPS-3 COATING REMOVED FROM NOTE 2, ZN A3-1, ZN A3-2, REMOVED INSERT AELS-1032-130, ZN B6-4, B2-4, C7-8, C3-8; REMOVED HOLES, ZN D8-4 ZN D2-4, ZN D7-8, ZN D3-8	XDF	11.10.13
H	DRAWING UPDATED TO CURRENT STANDARDS. SHT 1 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. SHT 2 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. (FOR FURTHER INFO SEE DSI 9364 & NCR 08-074)	AJS	08.08.20
G	REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING FLOAT BAGS, DWG REORGANIZED FOR CLARITY	DC	07.07.31
F	ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -011/-021	PH	07.01.18
E	CHANGE TOLERANCE, EASE MANUFACTURE	PH	06.04.25
D	UPDATE TOLERANCE, CHANGE HOLE SIZE	PH	06.01.23
C	LENGTHEN AFT EXTENSION	PH	05.09.27
B	DRAWING UPDATES	PH	05.06.10
A	NEW ISSUE	PH	05.02.07
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	XDF	KENT, WA	
CHECKED		DRAWING NO.	REV. I
MFG. APPR.		D3391	SHEET 1 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
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D3391-043 ASSEMBLY

D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

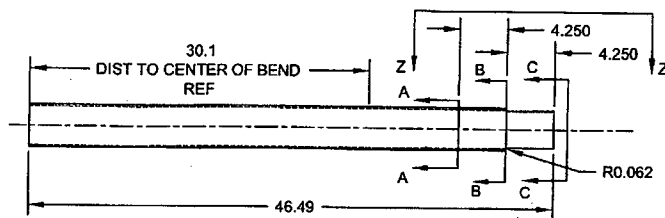
QTY	PART NUMBER	DESCRIPTION
X	D3391-043	Float Skidtube Assembly
1	D3391-021	FWD Tube Assembly
1	D3391-023	MID Tube Assembly
1	D3391-025	AFT Tube Assembly
2	D3591-1	Bushing
1	D4095-041	Wear Shoe
1	D4095-043	Wear Shoe
1	D4095-045	Wear Shoe
1	D4095-047	Wear Shoe
1	D4095-049	Wear Shoe
1	D4095-051	Wear Shoe
24	AN3C4A	Bolt
10	AN3C6A	Bolt
4	AN3C7A	Bolt
38	AN960C10L	Washer

GENERAL NOTES

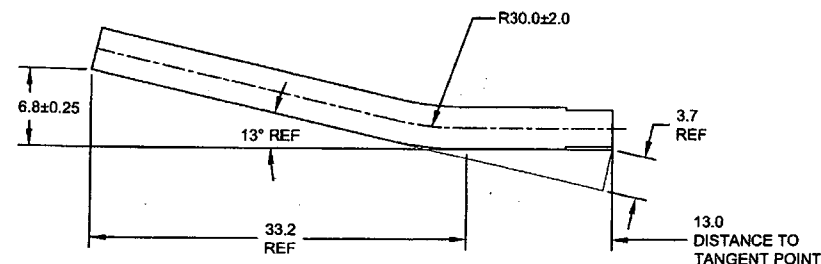
- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER. TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) UNITS: INCHES UNLESS OTHERWISE NOTED
- 4) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. CBORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.
- 5) FIT D4095-041 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-041
- 6) FIT D4095-043 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH THE APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-043

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2011-11-04

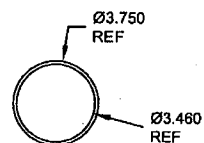
DESIGN	PH	DART AEROSPACE USA, INC	
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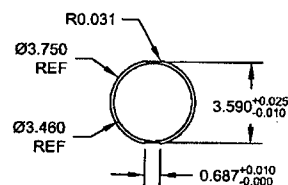
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



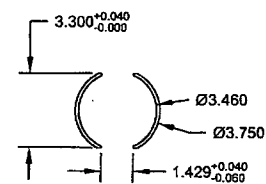
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



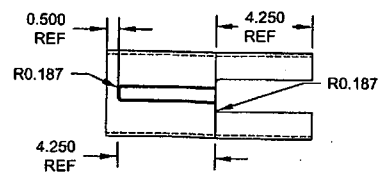
SECTION A-A
SCALE 2X



SECTION B-B
SCALE 2X



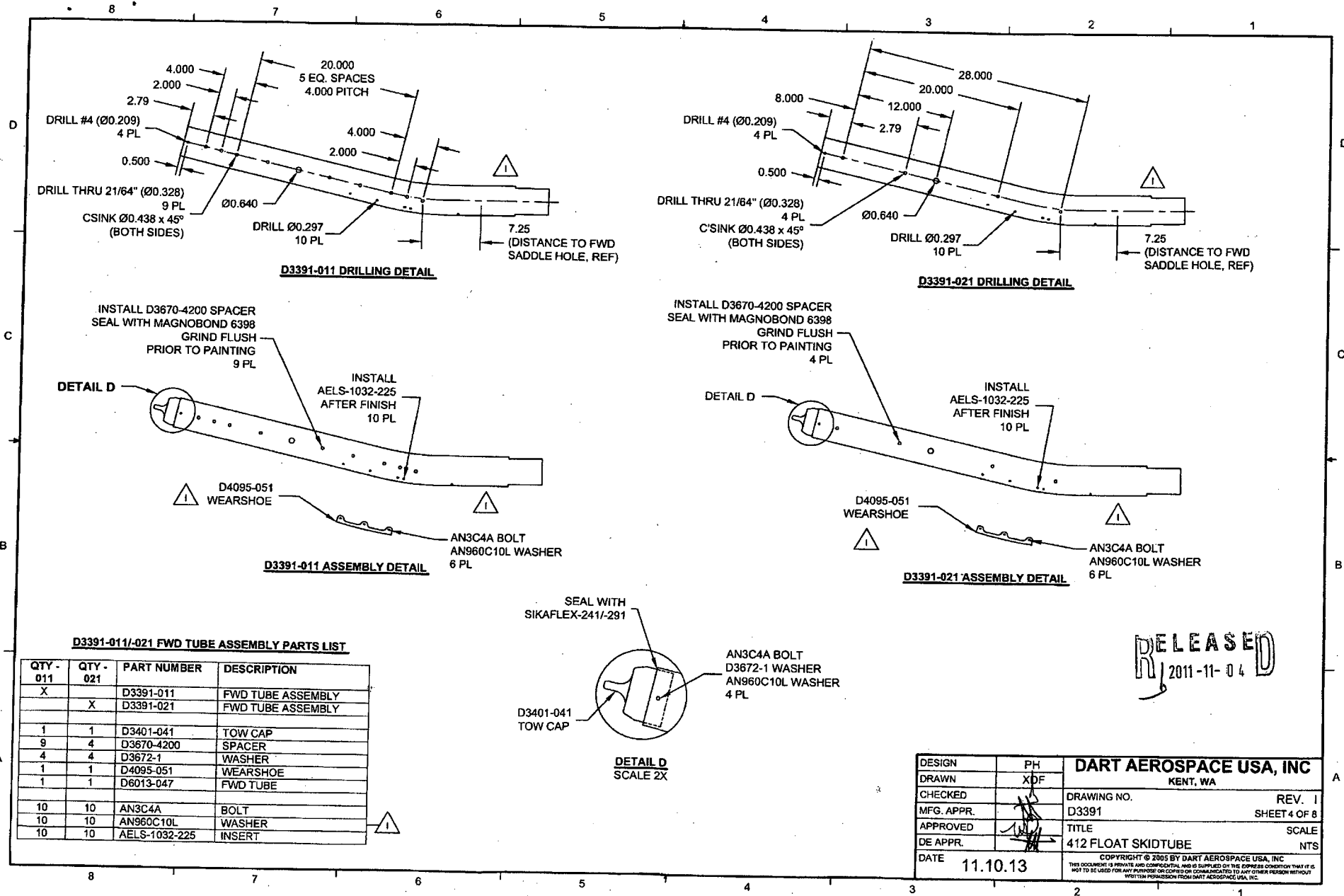
SECTION C-C
SCALE 2X



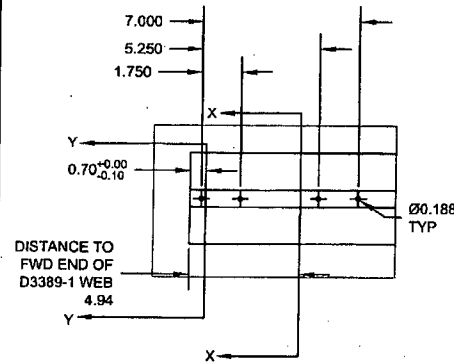
VIEW Z-Z
SCALE 2X

RELEASED
2011-11-04

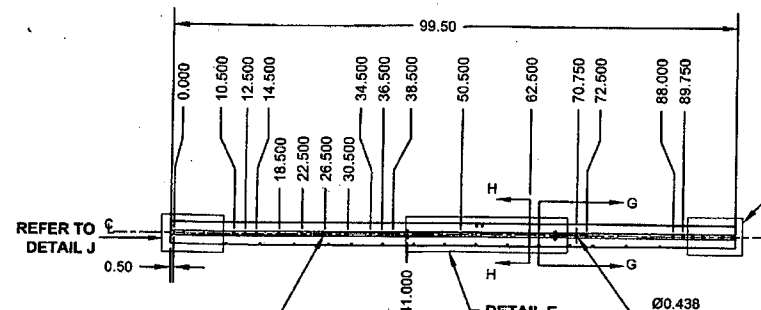
DESIGN	PH	DART AEROSPACE USA, INC	
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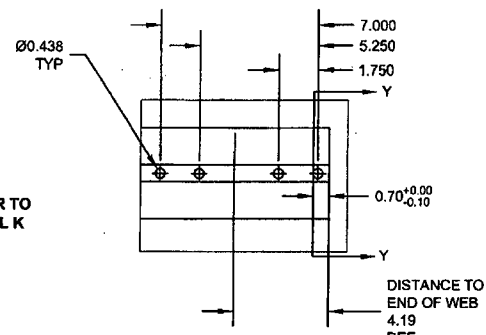
8 7 6 5 4 3 2 1



DETAIL J
SCALE 4X



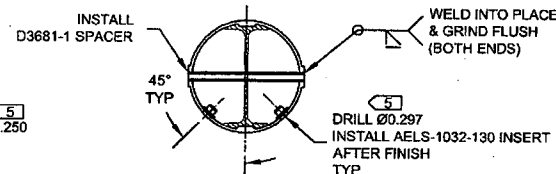
D3391-013 ASSEMBLY DETAIL
SCALE 5X



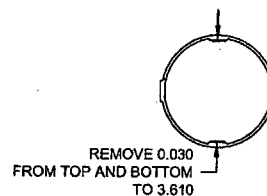
DETAIL K
SCALE 4X



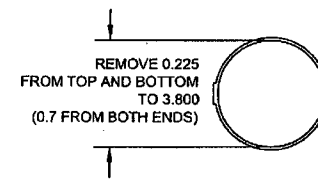
SECTION G-G
SCALE 5X



SECTION H-H
SCALE 5X



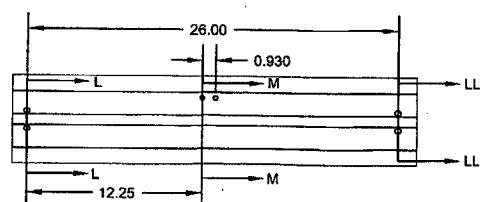
SECTION X-X
SCALE 5X



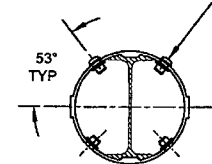
SECTION Y-Y
SCALE 5X

D3391-013 MID TUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
-013		
X	D3391-013	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
4	D3672-1	WASHER
4	D3672-3	WASHER
12	D3681-1	SPACER
24	AELS-1032-130	INSERT
4	ALS4-428-165	INSERT
4	AN960C10L	WASHER
4	AN960C416L	WASHER
4	MS27039C1-09	SCREW
4	MS27039C4-08	SCREW

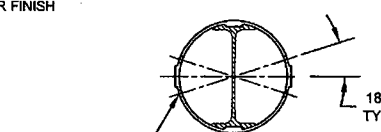


DETAIL E
SCALE NONE

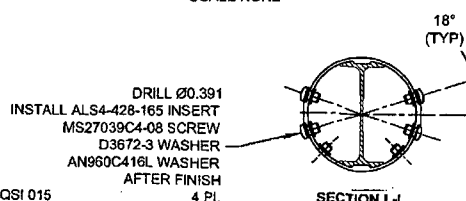


SECTION M-M
SCALE 5X

DRILL Ø0.297
INSTALL AELS-1032-130 INSERT
MS27039C1-09 SCREW
D3672-1 WASHER
AN960C10L WASHER
AFTER FINISH
4 PL



SECTION LL-LL
SCALE 5X



SECTION L-L
SCALE 5X

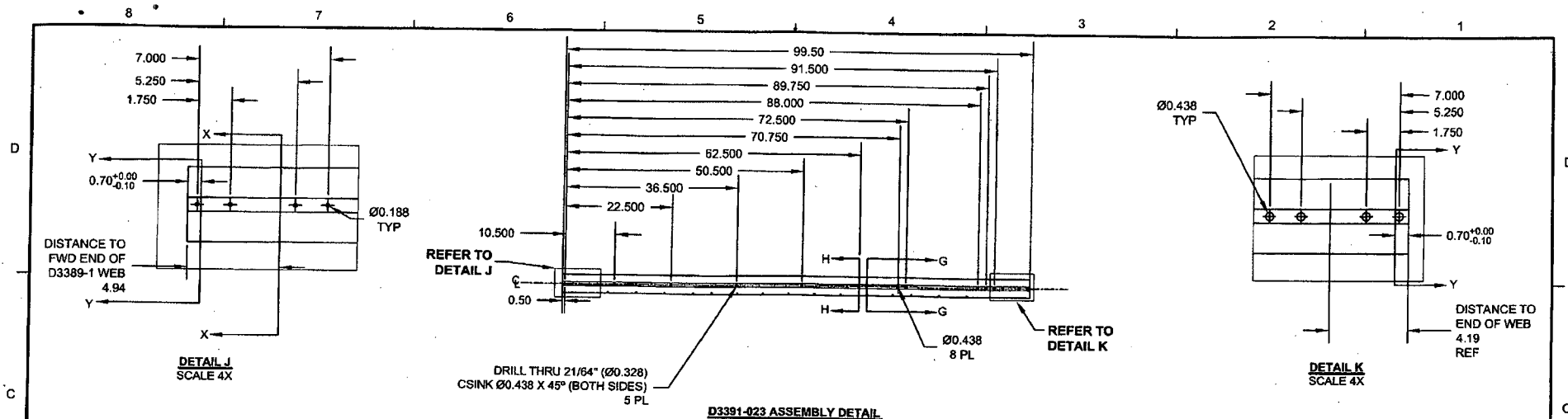
D3391-013 MID TUBE ASSEMBLY

- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015
- 3) WELDING: PER DART QSI 004

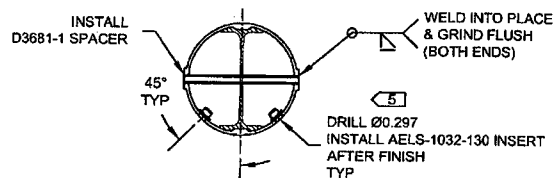
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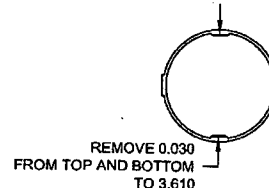
8 7 6 5 4 3 2 1



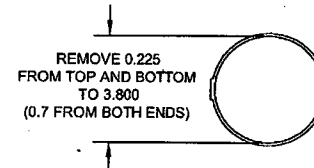
SECTION G-G
SCALE 5X



SECTION H-H
SCALE 5X



SECTION X-X
SCALE 5X



SECTION Y-Y
SCALE 5X

D3391-023 MID TUBE ASSEMBLY PARTS LIST

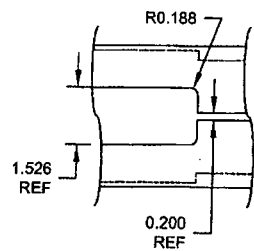
QTY -	PART NUMBER	DESCRIPTION
023		
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

D3391-023 MID TUBE ASSEMBLY

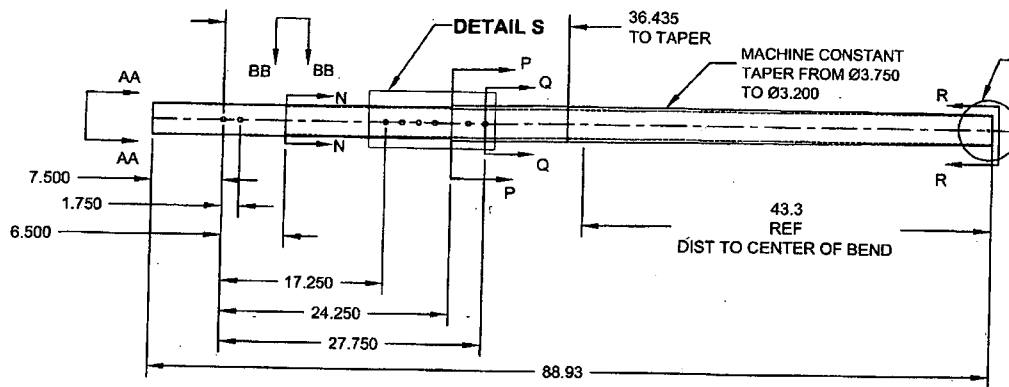
- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015
- 3) WELDING: PER DART QSI 004

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2011-11-04

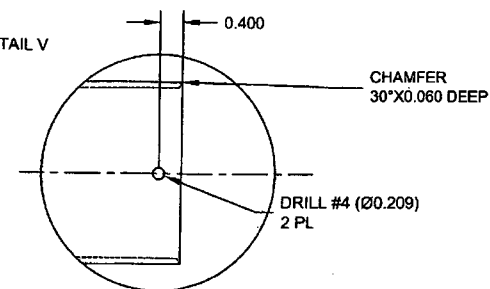
DESIGN	PH	DART AEROSPACE USA, INC	
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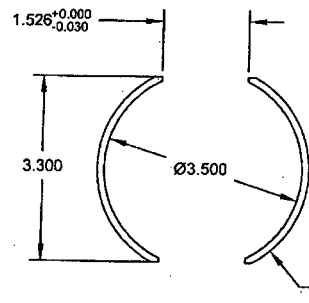
VIEW BB-BB
SCALE 4X



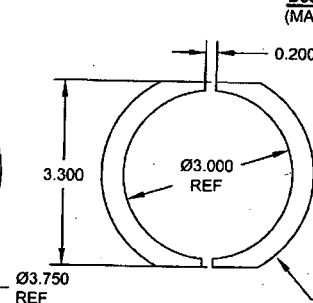
D3391-3 AFT DRILLING AND CUTTING DETAIL
(MAKE FROM D6014-090 SKIDTUBE MATERIAL)



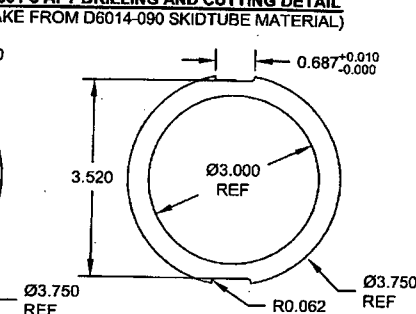
DETAIL V
SCALE 6X



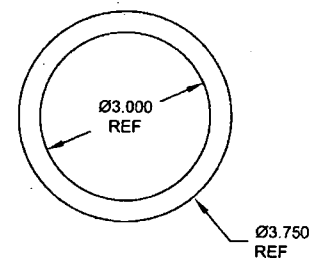
SECTION AA-AA
SCALE 6X



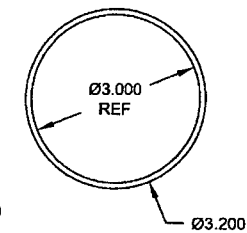
SECTION N-N
SCALE 6X



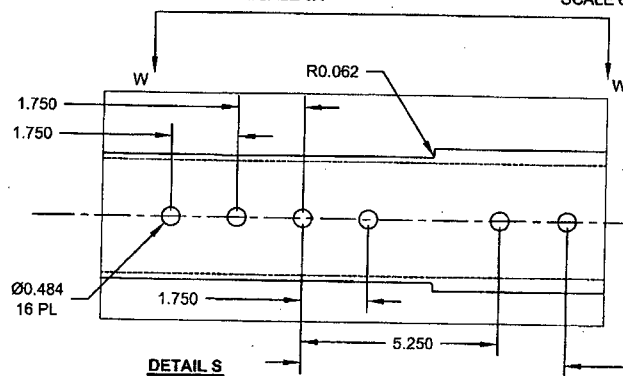
SECTION P-P
SCALE 6X



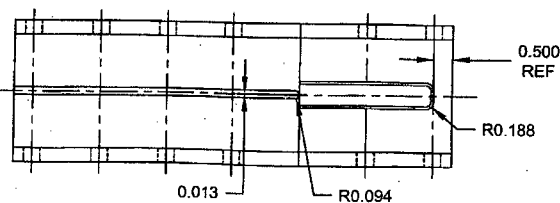
SECTION Q-Q
SCALE 6X



SECTION R-R
SCALE 6X



DETAIL S
SCALE 4X



VIEW W-W
SCALE 4X

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RT AEROSPACE LTD

Work Order:

112713

Description: Float Skidtube (412)

Part Number:

D3391-3

Inspection Dwg: D3391

Rev: I

Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Lathe Section						
14.000	+/-0.010	14.000	✓		tape	LG-25
3.500	+/-0.010	3.504	✓		vern	CNC-08
Ø3.200	+/-0.010	3.200	✓		"	
Ø3.750	+/-0.010	3.750	✓		"	
30° x 0.060 chamfer	+/-0.010	30° x .060	✓		"	
88.93	+/-0.030	88.93	✓		tape	LG-25

Measured by: *mm.l*

Date: 14/02/19

Audited by: *SPB*

Date: 14/02/19

HAAS Section

1.526	+0.000/-0.030	1.520	✓		Vern	ML-06
7.500	+/-0.010	7.500	✓		"	
27.750	+/-0.010	27.750	✓		M-020	ML-08
31.750	+/-0.010	31.750	✓		"	
35.250	+/-0.010	35.250	✓		"	
3.300	+/-0.010	3.305	✓		Vern	
0.200	+/-0.010	.200	✓		"	
3.520	+/-0.010	3.522	✓		"	
0.687	+0.010/-0.000	.687	✓		"	
R0.062	+/-0.010	R.062	✓		R-G	
Ø0.484	+0.005/-0.001	Ø.486	✓		Vern	

Measured by: *mm.l*

Date: 14/03/16

Audited by: *B.A.*

DAS

08

9-89

Date: 14/03/19

Rev	Date	Change	Revised by	Approved
A	06.04.24	New Issue P/O D3391-015/-025	KJ/JLM	
B	06.06.19	Dwg revision update	KJ/JLM	
C	07.04.20	Ø0.208 dimension removed	KJ/JLM	
D	07.09.06	0.400 dimension removed	KJ/JLM	
E	07.11.23	Dwg Rev. updated	KJ/EC/DD	
F	09.04.27	Dimensions updated per Rev H and NCR09-028	KJ/JLM	
G	09.11.16	Dimension 0.200 removed	KJ	
H	11.06.21	Dimension 44.995 removed	KJ	
I	12.05.15	Dwg Rev updated	KJ	
J	12.05.23	Dimension updated	KJ	
K	12.10.15	88.93 dimension removed	KJ	
L	12.11.28	88.93 dimension added	KJ	

